

William L. Johnson
Phone 805 386 0223
FAX 805 386 0224

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To: Vijay B. Chawan Fax: 703 872 9306
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.....
Request for interview form, statement, and authorization to act all included in FAX. Please Call me at
805 386 0223 to verify or propose a date and time. Thank you.

PATENT
Docket 262-23-232

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Smith, et al.

Serial No.: 09/680737

Examiner: Chawan

Filed: 6 Oct. 2000

Art Unit: 2654

Title: METHOD OF DECODING TWO-CHANNEL MATRIXED ENCODED AUDIO TO
RECONSTRUCT MULTICHANNEL AUDIO

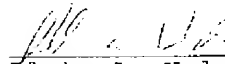
Mail Stop AMENDMENT
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AUTHORIZATION TO ACT IN A REPRESENTATIVE CAPACITY

The practitioner named below is authorized to conduct interviews and has the authority to bind the principal concerned. Furthermore, the practitioner is authorized to file correspondence in the above-identified application pursuant to 37 CFR 1.34:

William L. Johnson
Reg. No. 41,876
P.O. Box 1240
Somis, CA 93066
Phone 805 386 0223

This is not a power of attorney to the above-named practitioner. Accordingly, the practitioner named above does not have authority to sign a request to change the correspondence address, a request for an express abandonment, a disclaimer, a power of attorney, or other document requiring the signature of the applicant, assignee of the entire interest or an attorney of record. If appropriate, a separate Power of Attorney to the above-named practitioner should be executed and filed in the United States Patent and Trademark Office.


Blake A. Welcher, Attorney of record
Reg. No. 39,528
Digital Theater Systems, Inc.
5171 Clareton Drive, Agoura Hills, CA 91301
Phone 818 706 3525

Date: 11/17/04

PTOL-413A (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Applicant Initiated Interview Request Form

Application No.: 09/680737 First Named Applicant: Smith
Examiner: CHAWAN Art Unit: 2654 Status of Application: PENDING

Tentative Participants:

(1) William L. Johnson (2) _____

(3) _____ (4) _____

Proposed Date of Interview: 11/23 or 11/30 Proposed Time: 3 PM ^{EST} (AM/PM)

Type of Interview Requested:

(1) ☒ Telephonic (2) ☐ Personal (3) ☐ Video Conference

OR PLEASE SUGGEST DATE
and TIME - Call
805 3860223

Exhibit To Be Shown or Demonstrated: ☐ YES

☒ NO

If yes, provide brief description: _____

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(3) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(4) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Continuation Sheet Attached					

Brief Description of Arguments to be Presented:

SEE ATTACHED

An interview was conducted on the above-identified application on _____.

NOTE: This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

William L. Johnson
Applicant/Applicant's Representative Signature

Examiner/SPE Signature

William L. Johnson
Typed/Printed Name of Applicant or Representative

41,876

Registration Number, if applicable

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Serial No.: 09/680737

Brief Description of Arguments to be Discussed.

A second office action was mailed on 9/10/2004. New grounds for rejection are based on Fosgate in view of Griesinger. However, the rejection does not consider the applicant's arguments in response to the previous office action, which continue to apply with no less force to the new combination of references.

Although Fosgate does disclose a method of decoding two channel, matrix encoded audio, neither Fosgate, nor Griesinger, nor any other cited reference discloses the particular features recited in the claims of the present application. For example, Claim 1 contains the steps of "subband filtering the two-channel matrix encoded audio into a plurality of two-channel subband audio signals;" and also "synthesizing the multichannel subband audio signals in the subbands to reconstruct the multichannel audio". Neither reference discloses subband filtering or synthesizing the subband audio signals; they disclose merely steering wideband audio, with all spectral bands steered in concert. The recited steps are simply not disclosed either in the cited locations or anywhere in the references.

Claim 1 also includes the step of "separately steering the two-channel subband audio signals into a plurality of two-channel subband audio signals." (emphasis added). This step is not taught by the cited references. Since the reference does not teach separating each channel into a plurality of subband audio signals, it could not possibly teach "separately" steering the subband audio signals. Griesinger might teach separately steering the two wideband stereo channels, but does not teach separately steering the subband audio signals as recited. Note that the subband audio signals are clearly identified from the previous step, being produced by subband filtering the two-channel matrix encoded audio into a plurality of two-channel subband audio signals. The two-channel subband audio signals cannot reasonably be confused with the undivided, unfiltered two-channel audio signal. Griesinger does not disclose two-channel subband audio signals—only two-channel wideband audio signals. Therefore, he could not disclose steering subband audio signals, separately or otherwise.

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Applicant would also like to discuss the rejections of the other claims over combinations of Griesinger, Dressler, and (claim 5) Davis. As previously set forth in Applicant's response to the previous office action, Dressler (B) by explicit definitions and disclosed structures denies the possibility of simultaneous, multiple dominant signal (in different subbands). Therefore, Dressler cannot provide motivation to modify the prior art by separately steering in different subbands. In fact, Dressler considers the case in which multiple signals of nearly the same intensity are present, and teaches that in such a case no steering or only weak steering should be applied. Based on the teaching of Dressler, one would not be led to separate subbands by filtering, then analyze dominance separately in each subband. There is no suggestion that this process would create a more realistic or acceptable sound; the contrary is suggested.

In Davis (cited against claim 5), psychoacoustic masking effects are disclosed as a motivator for subband encoding prior to transmission through a band-limited channel. These effects are irrelevant or even contrary to the goals of the present invention. In the art of encoding, masking effects are exploited to reduce the amount of information to be transmitted. The present invention processes information after receipt and decoding; there is no reason to reduce the amount of information. Rather, the goal of the invention is to enhance and add definition to the sound: in effect, "unmasking". The exploitation of masking effects would not be expected to provide higher quality sound in a decoder or receiver, which has adequate signal to process. Keep in mind that the invention does not presuppose any particular type of compression or encoding (such as subband coding) at the encoder. Because the goals of the invention are opposite those of Davis, one would not at the time of the invention have been led to employ Davis' methods. This argument is further set forth in Applicant's previous remarks, submitted in response to the previous office action.

In light of these remarks and the others previously filed, Applicant believes that either all claims should be allowable, or that only minor amendments may be required to more clearly express that which the claims intended to convey. Accordingly, the Applicant requests a telephone interview, which should expedite prosecution considerably.